

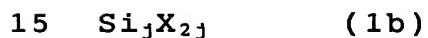
## CLAIMS

1. A silicon-cobalt film forming composition which comprises a silicon compound and a cobalt 5 compound.

2. The composition of claim 1, wherein the silicon compound is at least one compound selected from the group consisting of compounds represented by the 10 following formulae (1a) to (1d):



(wherein X is a hydrogen atom, a halogen atom or a monovalent organic group, and i is an integer of 2 or larger),



(wherein X is a hydrogen atom, a halogen atom or a monovalent organic group, and j is an integer of 3 or larger),



20 (wherein X is a hydrogen atom, a halogen atom or a monovalent organic group, and m is an integer of 4 or larger),



(wherein X is a hydrogen atom, a halogen atom or a 25 monovalent organic group, and k is 6, 8 or 10).

3. The composition of claim 1 or 2, wherein the cobalt compound is a cobalt complex having at least either one of a CO ligand or a  $\pi$  ligand.

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4. A method for forming a silicon-cobalt film which comprises the steps of forming a coating film of the silicon-cobalt film forming composition of any of claims 1 to 3 on a substrate and subjecting the film

to a heat treatment and/or a light treatment.

5. A silicon-cobalt film formed by the method of  
claim 4.